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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,663	08/06/2001	William M. Ayers	901715-EIT	3905

7590

08/30/2004

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EXAMINER

MAYEKAR, KISHOR

ART UNIT	PAPER NUMBER
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1753

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/720,663	AYERS, WILLIAM M.	
	Examiner	Art Unit	
	Kishor Mayekar	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-21 and 32-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-21 and 32-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments with respect to claims 11–21 and 32-34 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 13, 16, 37, 39 and 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 contains the trademark/trade name Teflon. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be

used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a material for the barrier and, accordingly, the identification/description is indefinite.

In claim 16, the claim is indefinite for reciting a precursor material which is considered an impositive structure element.

In claims 37 and 39, the same is applied to claim 16.

In claim 40, the same is applied to claim 16 to the reciting "a high boiling point liquid".

Claim Rejections - 35 USC § 103

4. Claims 11-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over MOISAN et al. (6,224,836) in view of MUTTERER, JR. et al. (6,258,329) and WARMBIER et al. (5,540,886) or LAUTENSCHLAGER et al. (6,033,912). MOISAN's invention, a reference cited in the last Office action, is directed to a device for exciting a gas by a surface wave plasma. MOISAN discloses in Fig. 6

that the device comprises a source of microwave radiation 56, a tube 40 made of a dielectric material such as silica through which tube a gas column to be excited flows, an enclosure comprised of hollow structure 24 and/or sleeves 42 and 44 made of an electrically conductive material (metal), a manifold 60, a treatment unit 66, a dehydration unit 68, and sampling cells 78 and 80. MOISAN contemplates that the device can be used for the purifying of gaseous effluents (col. 4, lines 15-17). The differences between MOISAN and the above claims are MOISAN are silent on the use of metal enclosure as the microwave reflecting enclosure and the use of a gas concentration sensor and a feed-back control system. MUTTERER, another reference cited in the last Office action, shows in a system for carrying out microwave assisted chemical reactions that cavities 12 and attenuator 13 are formed of structural metals that reflects microwaves (col. 4, lines 5-8) and a vessel 16 for holding materials in the cavity is of microwave transparent material while microwaves from the source are applied thereto (col. 4, lines 64-67). MUTTERER also shows the use of a control system 20 operatively associated with sensor(s) 17 (col. 4, lines 35-57). Both WARMBIER and LAUTENSCHLAGER shows the use a gas concentration sensor and a feed-back control system in an

apparatus for processing gases with a microwave (see Fig. 1 in WARMBIER and abstract in LAUTENSCHLAGER).

As to the first difference, since MUTTERER discloses the use of metals that reflects microwaves, it appears that MOISAN's metal enclosure possesses the recited property in absence of evidence to the contrary.

As to the latter difference, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified MOISAN's teachings as suggested by MUTTERER and either WARMBIER or LAUTENSCHLAGER because this would result in efficiently controlling the process on a continuous basis. Further, it has been held the motivation to make a specific structure is always related to the properties or uses one skilled in the art would expect the structure to have, *In re Newell* 13 USPQ 2d 1248, *Fromson v. Advance Offset Plate* 225 USPQ 26; *In re Gyurik* 201 USPQ 552.

As to the subject matter of claim 16, the reciting of the material to be treated cannot be given any patentable weight in a claimed device.

As to the subject matter of claim 17, the selection of any of known equivalent vapor removal devices would be within the level of ordinary skill in the art.

5. Claims 32-34 and 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over MOISAN '836 in view of MUTTERER '329 and WARMBIER '886 or LAUTENSCHLAGER '912. The further difference between the references applied above and the instant claims is the intended use of the system. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references' teachings because it has been held on the intended use of a device that "apparatus claims cover what a device is, not what a device does", *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ 2d 1525.

6. Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over MOISAN '836 in view of MUTTERER '329 and WARMBIER '886 or LAUTENSCHLAGER '912 as applied to claims 32-34 and 37-40 above, and further in view of AYERS (5,158,656), a reference cited by Applicant. MOISAN as applied above discloses that the device for processing gases for the purpose of purifying them. The difference between the references applied above and the instant claims is the provision of a semiconductor device fluidly coupled to the manifold. AYERS shows the above limitation after the purification. The subject matter as a

whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references' teachings because it has been held that the motivation to make a specific structure is always related to the properties or uses one skilled in the art would expect the structure to have, *In re Newell* 13 USPQ 2d 1248, *Fromson v. Advance Offset Plate* 225 USPQ 26; *In re Gyurik* 201 USPQ 552.

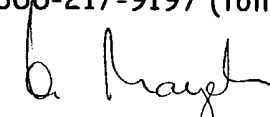
Response to Arguments

7. Applicant's arguments filed 24 May 2004 have been fully considered but they are not persuasive because of the new ground of rejections as set forth in the paragraphs above.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kishor Mayekar
Primary Examiner
Art Unit 1753